What is claimed is:

1. A method for forming a micro-pattern on a substrate by employing a mold having a predetermined pattern structure, the method comprising the steps of:

a) preparing a mold having a predetermined pattern structure containing a recessed portion and a protruded portion;

b) depositing a polymer material on the substrate;

c) rendering the protruded portion of the mold to be in contact the polymer material;

d) incorporating the polymer material in contact with the protruded portion of the mold into an empty space of the recessed portion thereof by using capillary force thereof, thereby removing the polymer material in contact with the protruded portion of the mold; and

e) exposing a portion of the top surface of the substrate by detaching the mold to thereby form a polymer micro-pattern on the substrate.

2. The method of claim 1, further comprising the step of:

c1) after said step c) but before said step d), performing a heat treatment to the polymer material at a preset temperature range.

3. The method of claim 1, further comprising the step of:

b1) after said step b) but before said step c), permeating a fluidizing material into the polymer material in order to provide fluidity to the polymer material.

4. The method of claim 1, wherein the mold is a polymer mold.

5. The method of claim 1, wherein the mold is an inorganic mold.

6. The method of claim 1, wherein the polymer material is formed on the substrate by employing a spin-coating technique.

7. The method of claim 1, further comprising the steps of:

f) depositing a thin film layer on an exposed portion of the top of the substrate; and

g) removing the polymer micro-pattern to thereby form a desired thin film micro-pattern.

8. The method of claim 3, wherein said step b1) includes the step of heating the fluidizing material to increase the evaporation thereof, thereby enhancing the permeation of the fluidizing material into the polymer material.

9. The method of claim 7, wherein the polymer micro-pattern is removed by using a solvent.

10. The method of claim 7, wherein the substrate is selected from the group consisting of a conductor film, an insulating film, a semiconductor film and an organic film.

11. The method of claim 8, wherein the polymer material is a novolac resin and the fluidizing material is PGMEA (propylene glycol mono ether acetate).

12. A method for forming a micro-pattern on a substrate by employing a mold having a predetermined pattern structure, the method comprising the steps of:

a) preparing a mold having a predetermined pattern structure containing a recessed portion and a protruded portion;

b) depositing a thin film layer on the substrate;

c) forming a polymer material on the overall surface of the thin film layer;

d) rendering the protruded portion of the mold to be in contact the polymer material;

e) incorporating the polymer material in contact with the protruded portion of the mold into an empty space of the recessed portion thereof by using capillary force thereof to remove the polymer material in contact with the protruded

portion of the mold, thereby forming a polymer pattern of a predetermined shape;

f) etching the thin film layer by employing the polymer pattern as a mask to thereby selectively remove a portion of the thin film layer; and

g) removing the polymer pattern to thereby form a desired thin film micro-pattern.

13. The method of claim 12, further comprising the step of:

h) after said step d) but before said step e), performing a heat treatment to the polymer material at a preset temperature range.

14. The method of claim 12, further comprising the step of:

h) after said step c) but before said step d), permeating a fluidizing material into the polymer material in order to provide fluidity to the polymer material before in contact with the mold with the polymer material.

15. The method of claim 12, wherein the mold is a polymer mold.

16. The method of claim 12, wherein the mold is an inorganic mold.

17. The method of claim 12, wherein the polymer material is formed on the substrate by employing a spin-coating technique.

18. The method of claim 12, wherein the polymer pattern is removed by using a solvent.

19. The method of claim 12, wherein the substrate is selected from the group consisting of a conductor film, an insulating film, a semiconductor film and an organic film.

20. The method of claim 13, wherein a part of the polymer material is incorporated into the empty space of the mold through the heat treatment, thereby rendering a remained part of the polymer material to be left on a top of the thin film layer.

21. The method of claim 14, wherein said step h) includes the step of heating the fluidizing material to increase the evaporation thereof, thereby enhancing the permeation of the fluidizing material into the polymer material.

22. The method of claim 17, wherein the polymer material is a novolac resin and the fluidizing material is PGMEA (propylene glycol mono ether acetate).

23. The method of claim 20, wherein the remained part of the polymer material left on top of the thin film layer is removed through an etching process.